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Monthly Statistical Report

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JANUARY 1991

SUMMARY

Total deliveries fell 1.4 percent in January versus the prior year—substantially less than the fourth quarter's decline of over 5 percent. There is less disparity between the two periods, however, than appears on the surface. The fourth quarter's drop had been exaggerated by the temporary effects of weather on heating-related demand in both 1989 and 1990, without which the fourth quarter's year-to-year decline would have been an estimated 2 to 3 percent.

This January's decline, on the other hand, was understated due to comparison against below-trend deliveries a year ago. Deliveries in January 1990 had been unusually low, in part because of the depressing effect on heating-related demand of weather more than 20 percent warmer than normal. Had the year-ago figure been more in line with the then-existing trend, deliveries this January would have been down more than 3 percent. In other words, after adjusting for the temporary effects of weather, petroleum consumption seems to be declining at about the same 2 to 3 percent rate as observed in the last part of 1990. The underlying trends in consumption for the individual major products are estimated to have been declining as well in January, with the possible exception of jet fuel which was likely flat at best.

January's crude oil production in Alaska, with some of the prior months' temporary difficulties with weather and other factors receding, exceeded year-ago production for the second time in the past four months. As a result of last year's enhancements to North Slope facilities and accelerated well fracturing, Alaskan output reached nearly 1.9 million B/D, up nearly 2 percent, year to year. Production in the lower 48, though holding steady compared with recent prior months, fell 3.1 percent year to year, and for the U.S. as a whole, production slipped 1.9 percent.

Total imports fell 20 percent in January from one year earlier, to 7.3 million B/D—but because of differences in inventory behavior, rather than any substantial shift in underlying import dependence. Imports had surged last January in order to replenish stocks drawn down by unusually strong, weather-related demand in the prior month. This January, by contrast, draws on inventories continued to offset a significant portion of current imports, as they have since August. Had these supplies come from imports rather than inventories during January, imports would have averaged about 8.0 million B/D, roughly the same as the average level for all of last year.

With January's draw, total inventories declined to 1,014 million barrels, among the lowest monthly levels of the past several years. Stocks of crude oil, gasoline, and distillate ended the month at levels lower than for Januarys of recent years but were still well above minimum operating levels.

Reflecting continued weakness in underlying demand, input to distillation units dropped 6.3 percent from last January. Output of most major products, except kerosine jet fuel, dropped as well. Utilization was at the lowest monthly rate in nearly three years.

PRODUCT SUPPLIED [1]

Gasoline

FLAT DELIVERIES, DECLINING CONSUMPTION.

Gasoline deliveries, after a roughly 3 percent decline in last year's fourth quarter, were essentially flat in January versus a year ago. The majority of indicators, however, strongly suggest a decline in consumption for the month.

Part of the apparent anomaly results from comparison against unusually low deliveries last January. Weak deliveries then, counter-balancing the unusually strong deliveries that had occurred in the prior month, were an estimated 100 thousand B/D below the then-prevailing trend. Compared against a more typical level for last January, deliveries would have declined 1.5 percent—still not in complete correspondence with other indicators of demand, which suggest a consumption decline of 2 to 3 percent.

Preliminary estimates of economic growth for the fourth quarter, for example, show nearly flat performance versus a year ago (and a 2 percent quarter-to-quarter, annualized decline from the third quarter). This contrasts with year-to-year gains of around 1 percent earlier last year and suggests a related dampening of gasoline usage of perhaps half a percent.

In addition, although retail gasoline prices have fallen substantially in recent months, they were still above pre-August lev-

API ESTIMATES
JANUARY

	Million B/D	Percent Change
Total domestic deliveries	16.7	(1.4)
Crude production[2]	7.4	(1.9)
Total imports[2]	7.3	(20.0)
Stocks (million bbl)[2]	1,014	(3.6)

els during January, providing another moderating influence on demand. Retail prices at month-end were more than 15 cents per gallon lower than in late November. However, they were still up roughly 15 cents versus levels before the Iraqi invasion last August, although a third of this was accounted for by the December 1 increase in Federal excise taxes. Eight states have also increased taxes by anywhere from 0.5 to 6 cents per gallon since the beginning of last August.

The influence of prices and a slowing economy are evident in data on miles traveled, which continue to show flat performance for the most recent periods available; in the first part of last year, miles traveled had been increasing at an average 3 percent rate. Thus, the evidence from the economy, price levels, and travel all indicate a continued decline for gasoline consumption in January.

Distillates

STRONG INCREASE PARTLY DUE TO YEAR-AGO WEATHER. Distillate deliveries' 9.3 percent, roughly 300 thousand B/D jump for January was largely, but not entirely, explainable as weather-related. Weather a year ago had averaged more than 20 percent warmer than normal, the warmest January in nearly forty years. With this January's weather closer to normal, we estimate that weather effects accounted for about two thirds of the year-to-year increase in deliveries. However, the remaining, weather-adjusted increase of around 3 percent still shows greater strength in deliveries for the month than is probable for underlying consumption.

Though colder weather this January than last boosted heating-related demand, outside these markets, distillate fuel oil consumption most likely fell in January. With industrial production off 1.4 percent, year to year, in December, rail ton-miles off about 7 percent in January, and other indicators generally concurring, consumption in the industrial, transportation, and off-highway diesel markets has undoubtedly been slipping.

Thus, overall distillate consumption is estimated to have been declining at a roughly 3 percent rate. Though January's deliveries were apparently stronger, even adjusted for weather, than implied by recent consumption trends, such short-term variability has not been unusual for distillate fuel oil deliveries. In fact, December's deliveries, in contrast to January's, had been weaker than other indicators would suggest.

Residual Fuel Oil

LARGE DECLINES CONTINUE. Residual fuel deliveries fell nearly 25 percent in January, moderating only slightly from the 31 percent rate of decline seen last month. However, while December's dramatic drop was at least partially the result of high demand caused by severe weather a year ago, the January decline came amid weather which was 20 percent colder than last year, and electricity demand which was up in most of the country. Last year, prior to the Iraqi invasion of Kuwait, deliveries were averaging over 1.3 million B/D. While they remained close to this level during August, they have fallen rather dramatically in the months since, averaging less than 1.1 million B/D since September.

Fuel substitution by utilities continues to provide the primary explanation for the year-to-year deliveries decline. For the month, electricity generation rose moderately above trend (growing by about 5 percent nationwide and by about 3 percent in the Northeast), but price differentials and natural gas availability continued to encourage gas use where possible. The gas surplus caused by slack heating demand early in the season meant that more abundant supplies were available for utility use at prices low relative to resid. While spot prices for resid fell about 30 percent during the month, these drops were matched by comparable declines in the price of natural gas, which already enjoyed a price advantage on a per-BTU basis.

Kerosine Jet Fuel

CONSUMPTION WEAKENS. Jet fuel deliveries fell by 6.1 percent in January. Excepting last month, the decline was the sharpest drop in eight years. However, unlike December, whose 9.7 percent drop was explainable by atypically high deliveries a year ago, the January decline is believed to reflect a drop in the underlying trend of consumption growth, estimated to be flat. The impact of the war on international travel, the shutdown of Eastern airlines, cutbacks by other U.S. air carriers, and a generally weak economy were all contributing factors to jet fuel's weakening.

Preliminary estimates suggest that the rate of growth in miles flown dropped in January, although by less than declines in jet fuel deliveries. Averaging about five percent growth during the fourth quarter, growth in miles flown is believed to have been flat in January, and was perhaps negative during the second half of the month. The suspension of flight services by Eastern on January 18 is believed to have been an important force at work during the month. Eastern was the number eight airline in the U.S., accounting for an estimated 3-4 percent of all miles flown. Its absence from the market place cut into deliveries by reducing the underlying rate of consumption.

Eastern's demise no doubt had a smaller impact on passenger travel than a simple look at its market share would suggest, as many would-be passengers merely flew other airlines. Because load factors on domestic flights during the fourth quarter of 1990 had been about 2 points below those of a year ago, it is believed that other airlines were able to accommodate these passengers without adding many extra flights.

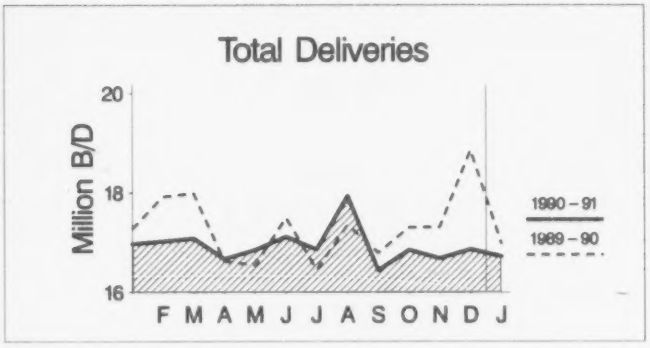
The outbreak, on January 16, of what has been an intensive air war in the Persian Gulf has increased overseas military jet fuel demand by as much as 500 thousand B/D from normal levels, according to some estimates. While causing a surge in demand abroad, the war has had a mitigating impact on jet fuel growth in the States, in part by reducing domestic military demand, but more importantly, by suppressing growth in international travel.

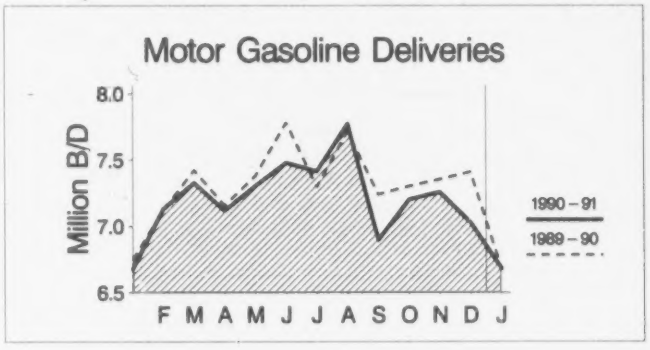
This segment of the market, accounting for nearly a quarter of miles flown, had been growing at double digit rates through the end of last year. However, travel abroad, particularly travel to Europe and the Mediterranean, is down significantly since the start of war. For instance, two major airlines serving trans-Atlantic routes are reported to have seen declines in bookings on these routes of 35 percent or more since the outbreak of war. If drops of this magnitude were typical of all trans-Atlantic carriers, and if Latin American and trans-Pacific travel saw only moderate declines in growth, then total international travel could easily have been down by more than 10 percent during the sec-

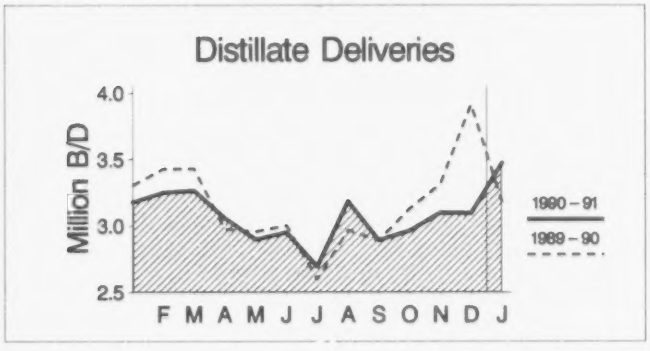
ond half of the month. Of course, a drop in bookings does not necessarily translate into an immediate drop in aircraft miles. Thus, the extent of international decline may not have been fully evident in January.

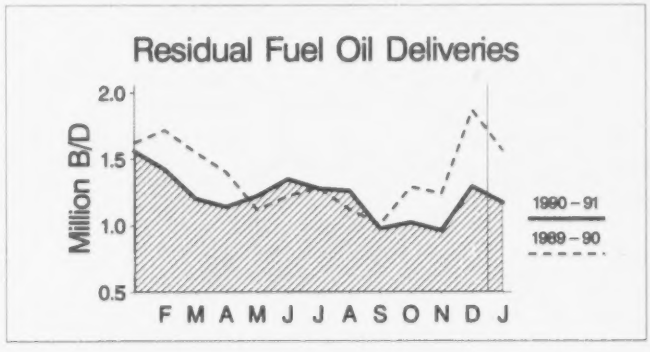
Other Oils

UP VERSUS WEAK JANUARY A YEAR AGO. Deliveries of "other oils" rose 2.9 percent in January over the depressed levels of one year earlier. Deliveries last January had been weak, particularly among the LPGs, due to the warm weather's effect on propane for heating and slack purchases of ethane for petrochemical feedstock use. Compared with the level of deliveries in more recent months, and taking into account typical seasonal patterns, deliveries of "other oils" appear to be sharing the weakness indicated for other petroleum products.









SUPPLY[1/]

Production

ALASKAN OUTPUT UP, YEAR TO YEAR. Declining at less than half the rate of last year's average 5 percent drop, domestic crude oil production slipped 1.9 percent in January. Output in Alaska, in particular, actually rose year to year by nearly 2 percent, the result of last summer's facilities enhancements and the accelerated well fracturing program on the North Slope. The full potential of North Slope facilities had been hampered by stormy weather and problems with tanker availability in the previous two months, but January's output reached nearly 1.9 million B/D, the highest monthly level since December 1989.

The apparent moderation in the decline in lower 48 production appears to be continuing as well. Output outside Alaska held roughly steady in January compared with prior months' production, at about 5.5 million B/D. Year to year, however, lower 48 production still fell 3.1 percent.

Imports

YEAR-TO-YEAR DROP THE RESULT OF STOCK DIFFERENCES. Total imports in January, reflecting the fact that a significant portion—more than 750 thousand B/D in January—of current U.S. supplies have continued to come from domestic inventories rather than from current imports, averaged 7.3 million B/D. Imports last January, in contrast, had reached the highest monthly level in nearly thirteen years, reflecting the replenishment of inventories at a rate of over 1.5 million B/D following the substantial drawdown in response to the weather-related surge in demand during December 1989.

Thus, January's 20 percent decline in imports was more the result of contrasting inventory behavior than of any marked shift in underlying import dependence. Without the stock draw, the month's imports would have averaged about 8.0 million B/D, in line with the average level of imports in 1990.

Mostly for similar reasons, January's product imports were down more than 1 million B/D from the prior January's level of more than 2.9 million B/D, which had been the highest monthly level since the late 1970s. However, over the last several months product imports have been running at lower levels than earlier, a result of weakening domestic demand and foreign prices which have often been less attractive to purchasers than for domestic products. Over the past five months, product imports have averaged 1.7 million B/D, versus levels in early 1990 that had typically been in the 2.1 to 2.3 million B/D range.

Imports of finished gasoline for the month averaged 240 thousand B/D, down about 180 thousand B/D, and imports of

distillate fuel oil averaged about 180 thousand B/D, versus more than twice that level a year ago. Residual fuel oil imports dropped by more than half to about 370 thousand B/D. Imports of kerosine jet fuel, for which domestic inventories are currently ample while demand appears to be weakening, dropped from 155 thousand B/D a year ago to 55 thousand B/D this January.

Refinery Operations

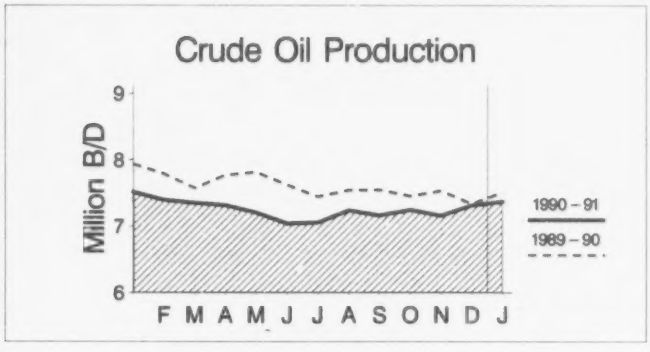
UTILIZATION FALLS. Refinery activity continued to slacken in January, with input to distillation units down 6.3 percent from last January's level. Output of gasoline fell 4.3 percent, distillate fuel oil, 9.3 percent from strong levels a year ago, and residual fuel oil, 14 percent. However, though emphasis on kerosine jet fuel lessened in January as output slipped to 1.33 million B/D from levels as high as 1.43 million B/D in recent months, output was still up 2.3 percent over last January.

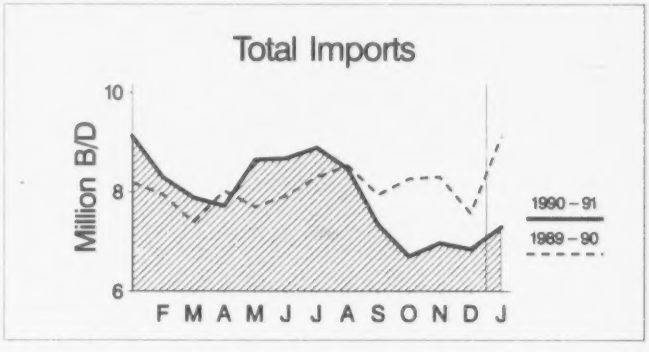
Utilization of active capacity was down to about 85 percent for the month, while on the basis of reported capacity, it was calculated at 81.6 percent. This was the lowest monthly rate in nearly three years.

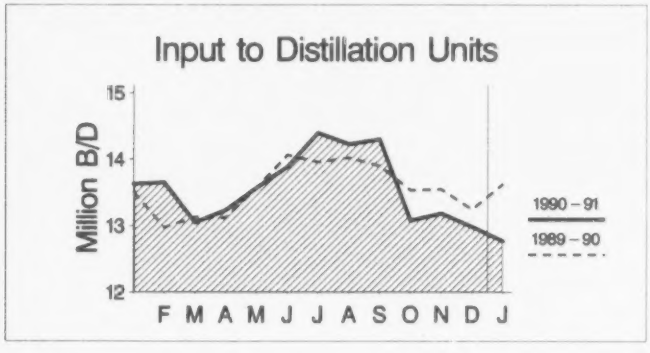
Inventories

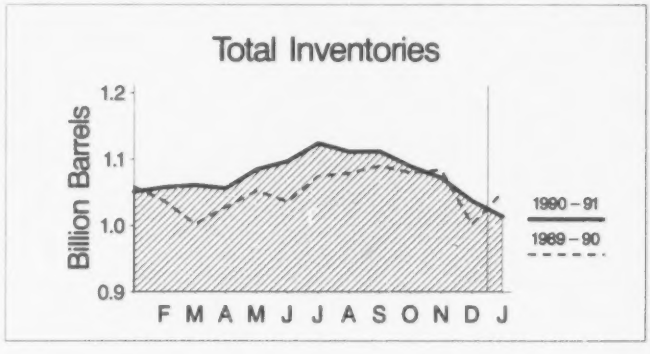
STOCK DRAW CONTINUES. Maintaining the trend evident since last August, total inventories continued to decline in January. The 24 million barrel drop contrasts with inventories which have averaged little change for that month in recent years (excluding last January's unusually sizable build). Since the end of last July, inventories have fallen 110 million barrels, contributing about 600 thousand B/D to supplies over the period. At 1,014 million barrels, they are among the lowest month-end levels of the last several years, but considered adequate for current needs.

Crude stocks rose 4 million barrels to 328 million barrels at month-end, still lower than typical for recent years but 28 million barrels above estimated minimum operating levels. Gasoline stocks rose 2 million barrels to 225 million barrels, and distillate fuel oil inventories dropped 19 million barrels to 111 million barrels, also lower than January levels of recent years but 20 to 25 million barrels above estimated minimum operating levels. Kerosine jet fuel inventories, however, at 45 million barrels, were among the highest ever of recent years.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 586 million barrels as of January 31, 1991).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	JANUARY			YEAR-TO-DATE		
	1991[1]	1990[2]	% Change	1991[3R]	1990[2]	% Change
Products Supplied:						
Total motor gasoline	6,679	6,675	0.1			
Finished leaded motor gasoline/*	280	404	(30.7)			
Finished unleaded motor gasoline/*	6,399	6,271	2.0			
Naphtha-jet	172	182	(5.5)			
Kerosine-jet	1,285	1,369	(6.1)			
Distillate fuel oil	3,474	3,177	9.3			
Residual fuel oil	1,172	1,561	(24.9)			
All other oils[4]	4,112	3,997	2.9			
Reclassified[5]	-172	7	*****			
Total domestic products supplied	16,722	16,968	(1.4)			
Exports	1,016	710	43.1			
Total products supplied	17,738	17,678	0.3			
Supply:						
Domestic production:						
Crude oil[6]	7,370	7,510	(1.9)			
Natural gas liquids	1,708	1,525	12.0			
Other supply[7]	607	1,063	(42.9)			
Total domestic supply	9,685	10,098	(4.1)			
Imports:						
Crude oil, total[8]	5,604	6,182	(9.3)			
Canadian	779	599	30.1			
Other	4,825	5,583	(13.6)			
Products, total	1,690	2,941	(42.5)			
Residual fuel oil	371	809	(54.1)			
Other	1,319	2,132	(38.1)			
Total imports	7,294	9,123	(20.0)			
Total supply	16,979	19,221	(11.7)			
Stock change, all oils	-759	1,543	*****			
Refinery Operations						
Input to crude oil distillation units	12,768	13,628	(6.3)			
Operable capacity	15,654	15,533	0.8			
Refinery utilization (%)[9]	81.6	87.7	(7.0)			
Crude oil runs	12,574	13,499	(6.9)			

Stocks (millions bbls.)	1990-1991		1990[2]	% Change from	
	Jan. 31[10]	Dec. 31[10]	Jan. 31	Previous Month	Year Ago
Crude Oil	328.0	324.3	352.3	1.1	(6.9)
Unfinished oils	100.2	99.1	103.5	1.1	(3.2)
Total motor gasoline/**	224.7	223.1	236.0	0.7	(4.8)
Finished leaded motor gasoline/*	9.7	10.2	17.8	(4.9)	(45.5)
Finished unleaded motor gasoline/*	176.5	173.5	177.8	1.7	(0.7)
Naphtha-jet	5.7	6.0	6.4	(5.0)	(10.9)
Kerosine-jet	44.6	44.8	36.4	(0.4)	22.5
Distillate fuel oil	110.7	129.8	117.9	(14.7)	(6.1)
Residual fuel oil	48.3	49.3	49.7	(2.0)	(2.8)
All other oils	151.3	160.7R	148.8	(5.8)	1.7
Total all oils	1,013.5	1,037.1R	1,051.0	(2.3)	(3.6)

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, Processing gain and Field Production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.